THE RAILROADS—DISCUSSION

A. M. Sakolski.—It is almost as difficult for me to discuss the papers of Mr. Hines and Mr. McPherson as it is to appraise the present railroad situation. Mr. Hines's excellent review of railroad history during the four years and his concise statement of proposed remedies are so clearly drawn that they leave room for little argument. It happens that the principal remedies proposed by Mr. Hines—namely, the improvement of maintenance service and greater coöperation in the use of railroad facilities—have already been pointed out by me on a previous occasion. It seems obvious, as Mr. Hines makes plain, that further railroad economies cannot be effectively derived from additional wage reductions. Labor should not be made to bear the brunt of economies, since further wage reductions are likely to intensify the present unfriendly attitude of railroad workers toward their employers; this will lead to inefficiency. Almost all classes of railroad labor have a dual allegiance, that is, their allegiance to the union and their allegiance to the employing company. The tendency in recent years has been to intensify union loyalty at the expense of the company loyalty.

Though it seems to be poor policy for the railroads to enforce further wage reductions, it is highly imperative that the obnoxious union restrictions on efficiency and economy in operations be abolished. This would do away with many of the so-called shop rules, labor classifications, and other petty annoyances created and enforced during the period of union domination of railroad labor. The Labor Board will have its hands full for many months in handling controversies arising from these so-called union rules. The present controversy of the Pennsylvania Company with the Labor Board is but a forerunner of many other similar controversies.

Mr. Hines struck the nail on the head in calling attention to the long neglect of maintenance problems by the railroad companies. I had occasion, at the time of the declaration of war against Germany, to investigate labor conditions in car repair shops. After a few weeks of study, it became readily apparent that the railroad companies had little interest in the comforts of or the employment conditions among car repairers. There was thus produced gross inefficiency in this branch of the railroad maintenance, so that the high cost of car repairs, together with difficulties in effecting repairs during busy periods sufficiently rapidly to replace crippled and damaged cars, may be ascribed to the general neglect of the railroad companies to work out this problem. The recent move by some companies to farm out their car repairs to private concerns is probably as much due to desire for cost reductions as for the elimination of labor union restrictions in the shops. Certainly this is a favorable field for investigation. If ten years ago

the government had inaugurated an intensive investigation of railroad efficiency, instead of wasting hundreds of millions in physical valuation, the ultimate use of which is seriously questioned, the public would obtain the benefit through reduced freight rates resulting from lower operating costs.

Regarding Mr. McPherson's statement that the Transportation Act is a constructive piece of legislation, we must heartily agree. In many of its phases, however, it will not stand strict economic analysis. This was pointed out by me at the last annual meeting, and my prognostications made then proved correct. The rate-making provision of the Act is certainly at variance with economic law. Yet this provision, which makes it mandatory on the part of the Commission to fix rates so that the railroads will earn a fair return on their value, had to be inserted in order to preserve the credit of the railroads. Without such a provision in the Act, railroad securities would have undergone a serious slump and the companies would be unable to do further financing. Expediency and political considerations were the determining factors in the law, and not economic principles. Therefore, the rate-making provision should remain without change.

Mr. McPherson is also correct in his statement that freight rates which will serve the country best are not always such rates as will furnish the railroads a fair return on their value. The experience of the last year has proven this. The result of the Commission's rate adjustment has been that the rates have not benefited business, and have not benefited the railroads. The reason for this maladjustment is due to the method of increasing the general level of rates without regard to the changes that result thereby in individual rates. What is needed at the present time is a permanent commission to constantly study the effect of rate changes on industries.

Mr. McPherson appears to advocate the valuing of the ralroads on the basis of the market prices of their securities. Though physical valuation has proven ineffective and wasteful and is likely to assist very little in the problem of rate regulation, a valuation based upon current market quotations of securities is likewise defective. The market price of any security represents the valuation placed by a very few buyers and very few sellers. In other words, the supply offered for sale at a particular time and the demand at the current price at that time, are important factors in fixing market value. Accordingly, such market value does not represent the true valuation of the total amount outstanding of any security. Take the example of Pennsylvania Railroad stock—a few hundred shares of this stock changes hands each day, notwithstanding the fact that the total issue exceeds a half billion dollars. But, can it be said that the true value of the Pennsylvania Railroad should be based on the market value of

a few hundred shares? If so, then the relative temporary position of security buyers and sellers will determine the valuation of railroads, rather than earning power or other intrinsic considerations.

Mr. Mc Pherson, of course, hesitates to offer any constructive suggestions as to changes in the Transportation Act. One change, to my mind, is particularly desirable. This concerns the dual authority over the railroads exercised by the Labor Board on one hand and the Interstate Commerce Commission on the other. These commissions have taken opposite attitudes in the matter of adjusting wages to freight rates or freight rates to wages. A situation of this kind places the railroads between two blades of a shears, and unless there is a change, the railroads' solvency is likely to be scrapped without any benefit to the public at large.

One can hardly escape the conclusion that the only way to remedy the railroad situation is to permit the railroad companies to follow a vigorous policy of operating economies. Changes in the law, additional rate hearings, and the like are of little avail. What is needed to save the railroads from general bankruptcy or government operation is unimpeded retrenchment in all operating divisions.

Wage reductions, changes in working conditions, and adjustments of rates for the production of greater revenues, do not promise sufficient financial relief to the railroads. Economic wastes in railroad operations require elimination. American transportation has outgrown the system under which it now operates, and only a recognition of this fact will save railroad companies from government operation. As pointed out by Mr. Hines, a system of coördination of services and facilities is required. It is not expected that there will be general approval of this plan by many railroad executives; but whatever action is finally taken, it is an undisputed fact that intensive unhampered economy is needed to keep the roads in a solvent condition.

Now, let me mention some of the specific problems of economies in railroad operation. There are those relating to (a) standardization and use of equipment; (b) the joint use of shops, yards, and terminals; (c) the coöperative purchase of supplies; and (d) the harmonizing of traffic relationships. Many of these matters are already under the jurisdiction of the Interstate Commerce Commission, but it is readily apparent that a governmental agency such as the Commission, acting in both a judicial and executive capacity, is incapable of adequately handling these problems without the direct assistance and coöperation of active railroad operating officials and organizations of business men.

M. O. Lorenz.—Mr. Hines has given an admirably clear review of recent railroad history. The most interesting thing to me about his paper is that he stresses the need for economies in certain directions

and does not have much to say about reducing wages. Assuming that there is large opportunity for such economies, I doubt whether they can be relied upon for any early pronounced reduction in the cost of railroad operation. It takes time to work them out. It is important, I think, to recognize just what the wage increases enumerated by Mr. Hines have meant from the standpoint of operating costs. The effect of these increases is now being felt. In 1915 the average earning per hour of all classes of railroad labor was about 27 cents; in 1916 it was about 28 cents; in 1917, 32 cents; in 1918, 46 cents; in 1914, 55 cents; in 1920, 66 cents; in the first half of 1921, 69 cents. That was the peak. Since July 1, 1921, the average I estimate at about 61 cents. That is an increase of 126 per cent over 1915. The pay roll is not far from 60 per cent of the operating expenses. It must be apparent that such radical increases in wages would necessarily greatly increase the charges to the public regardless of any changes in the method of organization conceivable in the near future. These averages are obtained by dividing the total compensation by total man-hours, and, hence, because of changes in the composition of the man-hours from year to year, are only approximately correct.

The railroad problem presents itself to some persons as a sort of triangular deadlock. Rates, from this point of view, cannot be much reduced unless wages are reduced or traffic greatly increased, and traffic will not increase until rates are reduced. But I do not believe the great fluctuations in the volume of traffic in recent years have been much influenced by our freight rate policy. Traffic would eventually doubtless revive with the present average level of freight rates unchanged, assuming proper relationships between commodities. What is desirable is that the rate level be made stable as soon as possible. I do not pretend to be able to say just how much railroad wages should be reduced, if at all. That is for the Railroad Labor Board to say in the light of the evidence relating to the various criteria for a fair railroad wage given in the Transportation Act. A mere comparison of percentage increases in wages and cost of living is not controlling. Whatever wages are established by the Labor Board as reasonable can and should be paid through the rates by those who use transportation services. The railroad employees should not, under the present organization of the industry, be regarded as sharing in the risks of the management. The desirability of labor copartnership in railroading has been suggested, but this is still a dream. Railroad employees are entitled to fair wages largely regardless of the profits of the carriers. I do not agree with Mr. Sakolski in the opinion which he has just expressed that much would be gained by giving jurisdiction over wages to the Interstate Commerce Commis-

sion. In expressing these opinions, I am, of course, speaking for myself alone and not in any official capacity.

In connection with what Mr. Hines said about the curtailment of maintenance in 1921, I wish to point out that the charges for maintenance in 1920 were extraordinarily high and are not to be taken as a standard for a proper maintenance in 1921. The carriers have in fact in recent months expended about twice the amount spent on an average for the same months in the test period. Allowing for the difference in the cost of labor and material, and considering the subnormal traffic in 1921, the cut in maintenance expenditure as compared with that for 1920 is not at all alarming, although there is deferred maintenance to be done before the next great revival of traffic.

Turning to Mr. McPherson's paper: I am in agreement with his statement of general economic principles, but I do not agree that he has stated the effect of government regulation of railroads with entire justice. Mr. McPherson states that legislation has advanced in that bureaucratic control which impairs efficiency and retards progress. Mr. McPherson says the protection of the railroads has been neglected in order to quiet popular clamor. There is not time to discuss this matter here, but I wish to say that government control has not, it seems to me, prevented private initiative from developing a high degree of efficiency in railroad operation, and has at the same time secured to the public the lowest possible price for transportation services, although, it is true, in certain periods, somewhat too low a price.

The railroads are emerging from their financial difficulties with the machinery that has been provided by the Transportation Act. But there is an important feature of the Transportation Act which as yet has been untried, and that is the provision for recapturing a part of the earnings of the more prosperous corporations in excess of a given standard. This provision will, if it operates as intended, leave some incentive to private endeavor and at the same time will make it more probable that the public will acquiesce in liberal earnings of railroads, which, of course, are necessary for their proper extension and development; and the excess earnings recaptured could be used in strengthening the whole transportation system. If this provision fails of its purpose, the result will probably be the regional or national consolidation of the railways with an extension of public control not far removed from government ownership.

Julius H. Parmelee.—The value of these helpful and practical papers on the railway problem seems to me to lie in the emphasis which is laid upon the vital and fundamental importance of applying economic principles to the railway situation. Because sound economic

principles have not been so applied in the past, our problem of so creating and maintaining the transportation industry as best to serve the public has drifted along with but little intelligent effort at a solution.

Mr. McPherson refers to the loose thinking that has pervaded much of our governmental dealings with the railways as a "putting of the cart before the horse"; Mr. Hines denominates it a "state of mind." Whatever the phraseology, the fact remains, and I am glad to see it emphasized and reiterated in this body of economists, that the crying need of the railway industry has for years been that the regulation of their activities should be guided by sanity, and by the application of economic principles such as obtain in any other industry.

Take for example one feature to which Mr. McPherson has referred; the problem of reaching a fair valuation of railway property. In some ways this is fundamental to all the other problems in the railway world today. Under the Federal Valuation Act of 1913, the Interstate Commerce Commission has for nearly nine years been occupied with a so-called "physical valuation" of the railways of the United States. The very term "physical valuation" is a misnomer, from an economic point of view: if a thing is valuable, it is not so much because it has any intrinsic value in and of itself, but solely because it is capable of producing something that may be utilized and therefore has a consumption or use value. What the Commission is doing is to ascertain, as accurately as the difficulty of the problem permits, the physical *cost* of railway property, which may be, and usually is, a very different thing from its *value*. Thus when the physical appraisal has been completed, only the first step will have been taken toward a fair valuation.

Yet the railway valuation problem looms up today as of far greater significance than it did when the Valaution Act was passed. This is because of two important provisions in the Transportation Act of 1920. In the first place, railway rates are to be fixed at a level designed, as nearly as may be, to produce a given rate of return on railway value as determined by the Interstate Commerce Commission. Under this provision, the whole fabric and structure of our freight and passenger rates is to be built up to a point which hinges entirely on the aggregate value as determined under the law. If the value is set unduly high, rates must be made greater than they should be; if unduly low, then rates too become lower than is proper. The importance of fixing a fair and accurate value becomes vital not only to the railways themselves, but also to the whole body economic, for railway rates run like a silver thread through the whole warp and woof of our economic fabric.

In the second place, the so-called "recapture" clause of the Trans-

portation Act provides that whenever a railway company's net income rises above a 6 per cent return on its value, one-half of the excess above 6 shall revert to, or be recaptured by, the government. The act has made it extremely important to the individual railway, therefore, that its value shall be fairly determined, for otherwise it stands to lose, if its value is fixed too low, just as it may gain from fixing the value too high.

The question at once arises as to the proper basis of a valuation of railway property. This is not the place or time to enter upon a discussion of that moot question, but I wish merely to stick to my text by pointing out that here, if anywhere, the railway problem is crying out for a solution based on economic principles, and those only. Such a solution is vital to everything that our transportation industry stands for in the economic life of today.

Thus far, the Interstate Commerce Commission has made but a tentative valuation of railway property as a whole, and that for rate making purposes only. The aggregate value of $18,900,000,000, so fixed by the Commission last year, was $1,140,000,000 less than the property investment of the railways, that is, the book value of their property, but was $2,350,000,000 greater than the par value of railway securities outstanding in the hands of the public. The Commission has given no inkling as to how it arrived at this tentative valuation, but it may be assumed that the following elements were considered:

1. The property investment account of the railways.
2. The results of the so-called "physical valuation" work to date.
3. The par value of railway securities outstanding.
4. The material and supply accounts.
5. The needs for working capital.
6. The elements of appreciation and "going value."
7. The results of special investigations made by the Commission from time to time into the financial history of individual railway companies.

Possibly the Commission also took into account the market value of railway securities, although it is a matter of serious question whether the valuation of an industry whose net income (and, therefore, its credit) is to be fixed by that very valuation should be made to depend on what the market thinks the valuation is likely to be. I do not agree with what seems to be Mr. McPherson's suggestion that the value of a railroad company is reflected in the market value of its stocks and bonds. A critic of the railways recently asserted that the market value of railway securities today is nearly seven billion dollars *less* than the tentative valuation of railway property made by the Interstate Commerce Commission last year. Assuming this assertion

to be correct, can it be argued that the net income of the railways should be correspondingly reduced by the Commission, through a drastic reduction in rates? If that were actually done, the market value of railway securities would unquestionably drop still lower than it is today, and by a series of successive reductions, first in market value, then in net income, we should arrive at an impossible and absurd situation. The truth is, it seems to me, that the application of economic principles to a regulated, as contrasted with an unregulated, industry requires that a different method of valuation be utilized. Why there is a difference is indicated in a question put by the Chairman of the Senate Committee on Interstate Commerce to a witness in a recent hearing. The question was this: "Do you regard the market value of public utility securities, where the government has and exercises the right to determine the revenue, and the right to determine from 40 to 50 per cent or more of the expenses, a fair criterion of the value of the property?" This question, of course, answers itself in the negative.

In my opinion, among the principal things to do in valuing a public utility for rate-making purposes should be, first, to ascertain its annual needs in the way of net income for fixed charges, reserves, dividends, and surplus; and second, to fix rates so as to produce such a net income. In this way, rates will come to be adjusted to the needs of the railway company, just as Mr. McPherson has suggested, and properly, that they be adjusted to the economic needs of industry in general.

Mr. Hines has in the clearest and most convincing fashion outlined the difficulties underlying the railway operation during the past four years, and the extent to which abnormal—that is, uneconomic—conditions have crept in to interfere with an orderly approach to a solution of the many problems involved. He might have added that the year 1922 will also have its very serious problems, for as we approach the new year there is an unusual degree of uncertainty as to three important factors which are always uncertain. These factors are the level of traffic, the level of rates, and the level of wages. The matters of rates and wages are even now under consideration by the administrative bodies that are respectively responsible for them, but the level of traffic is a matter as yet in the lap of the gods. That there will be an improvement in 1922, however, I firmly believe, and a turn for the better in that respect will go far toward assisting a solution as to rates and wages.

In fact, given a set of basic economic principles to go on, the railway industry will in the long run adjust itself, and will become what its function in the economic organism calls for—the efficient handmaid of industry. While Mr. Hines was fully justified in emphasizing the

difficulties of the past and the present, and in pointing out the problems yet be to solved, I feel sure he will agree with me that neither are these problems new nor have they been overlooked by railway students. I feel also sure that both he and Mr. McPherson will agree that the Transportation Act of 1920, with all its compromise features and all its other faults and imperfections, was a distinct step forward toward an orderly solution of the railway problem, and that, so far as it does apply economic principles to a situation that badly needed them, the act has already proved itsclf a constructive piece of legislation.